Fact Sheet



For Draft/Proposed Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on September 19, 2006

Permit Number: R30-10900019-2006 Application Received: April 21, 2010 Plant Identification Number: 10900019 Permittee: Dominion Transmission, Inc Facility Name: Loup Creek Compressor Station Mailing Address: 445 West Main Street

Clarksburg, WV 26301

Permit Action Number: SM01 Revised: Proposed

Physical Location: Kopperston, Wyoming County, West Virginia

UTM Coordinates: 449.31 km Easting • 4176.86 km Northing • Zone 17

Directions: From I-77 at Harper Road, turn onto State Rte. 3 north for 10.4 miles.

Turn onto Rte. 99 west for 14.3 miles. Turn left on Rte. 85 and travel 4 miles to Kopperston Grade School. Turn left on private road to Loup

Creek Station.

Facility Description

Loup Creek Compressor Station is a natural gas facility that services a natural gas pipeline system covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day.

The significant modification (SM01) was received on April 21, 2010 and covers changes included in R13-2839 (issued on July 12, 2010). The submittal was for a request to replace the glycol dehydration unit at the station. Additionally, the flare will be replaced with an upgraded unit and permitted for guaranteed control efficiency for HAP reduction.

Emission Unit IDs-004-01, 005-01, 0001 are replaced with Emission Unit IDs- RBR01, DEHY01, F1. The changes are shown in section 1.1.

Emissions Summary

The emission changes under this minor modification are follows:

Pollutant	Annual Emission change		
	(tpy)		
NO _x	+ 0.39		
СО	+ 0.82		
VOC	-9.8		
SO_2	0.0		
PM_{10}	+0.01		
Total HAP	-12.78		

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 968.63 tons of NOx and 102.74 tons of CO. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Dominion Transmission, Inc is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Particulate matter and opacity limits for indirect heat exchangers.		
	45CSR6	To Prevent and Control the Discharge of Air Pollution from Combustion of Refuse		
	45CSR10	Sulfur requirements for fuel burned		
	45CSR13	Construction permit requirements		
	45CSR30	Operating permit requirement.		
State Only:	45CSR4	No objectionable odors.		

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (if any)
R13-2839	7/12/2010	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

As a result of the inclusion of R13-2839 requirements, the following conditions have been added to the Title V Permit:

3.1.16, 3.1.17, 3.4.5, 4.1.2 through 4.1.5, 4.2.1, 4.2.2, 4.4.1 and section 6.

Conditions 3.1.9, 3.1.10, 3.2.1, 3.2.2, 3.2.3 and 3.4.1 have been updated for the new dehydration unit.

Condition 5.1.1 has been updated with the new flare capacity and PM emissions for the new flare.

Conditions 5.1.2 and 5.1.4 have been relocated to Title V permit conditions 5.1.8 and 5.1.10. These conditions are now also contained in the R13 permit for the new dehydration unit.

Section 5 has been updated with new requirements from R13 for a new dehydration unit.

Region 3 has requested that all annual compliance certifications be submitted electronically (e-mail), so the permit templates have been updated in conditions 3.5.3.and 3.5.5.

The Title V permit boilerplate has been revised such that a new Section 1.2 Table has been added which lists all the active R13, R14, and/or R19 permits and their date(s) of issuance. Also, the underlying authority for any conditions from the R13, R14, and/or R19 permits has been changed to cite the original permit number in the Title V permit. These changes will eliminate the need to go through the entire Title V permit to change the R13, R14, and/or R19 permit numbers each time an R13, R14, and/or R19 permit is modified. The only required change will be to the Section 1.2 Table

45CSR10 The new dehydration unit is subject to 45CSR10 and requirements were already included in conditions 3.1.9 and 3.1.10 of this permit. Therefore, by having "DEHY01" listed in these conditions shows that the new unit is subject to the applicable 45CSR10 conditions.

In the emission summary of this fact sheet, the annual emission change for total HAPs is -12.78 tons per year. The explanation for this annual emission change is as follows:

	Previous Fact Sheet			
			Total	
	Station minus Dehy	Dehy (w/ 95 % control)	Station	
Total HAPs				
(TPY)	9.80	0.93	10.73	

The DAQ (during the last permit term) determined that control efficiencies could not be granted without a permitting the device as a federally enforceable control device, the flare could not take credit for any destruction efficiency. As such in the new application, HAP emissions from the existing Dehy were estimated at 16.71. This estimate included use of the most recent gas analysis within the GLYCalc model. The total facility-wide HAP

potential with the old Dehy at uncontrolled levels would have been 26.51 (9.80 + 16.71). The application only showed the reduction in the potential HAP emissions from the replacement of the dehydration unit, not the new facility-wide potential. Therefore, the new facility-wide potential would be 13.73 (9.80 from the facility minus Dehy and 3.93 from the new Dehy). The reduction of 12.78 tons is from 26.51 (facility-wide emissions with no control) minus 13.73 (facility-wide with new Dehy).

As shown in the table below (part of table 1.1 of this permit): DEHY (flare) has been replaced with a new flare, F1; RBR01 has been replaced with new RBR01; DEHY01 (listed as DEHY in the emission units table, but listed as DEHY01 in the permit conditions) has been replaced with new DEHY01.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
<u>RBR01</u>	RBR01	Dehydration Unit Reboiler	<u>2010</u>	1.5mmbtu/hr	<u>N/A</u>
DEHY01	DEHY01	Dehydration Unit/Still Column	<u>2010</u>	35mmcf/day	<u>F1</u>
<u>F1</u>	<u>F1</u>	Dehydration Unit Controlled Flare	<u>2010</u>	0.2mmbtu/hr	<u>F1</u>
005-01*	RBR01	Dehydration Reboiler; Natco 5GR-500	1996	0.70 MMBtu/hr	N/A
004-01*	DEHY	Dehydration Unit Still; BS&B International	1950	35 mmscf/day	Flare
0001*	DEHY	Dehydration unit flare; 95% destruction efficiency	1997	176.9 acf/min	N/A

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

40 CFR 64 - Glycol Dehydration unit is not a major source of HAPs. Therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

45CSR14 (Permits for Construction and Modification of Major Sources of Air Pollution for the Prevention of Significant Deterioration)

The construction of the Loup Creek Station does not constitute a major modification under 45CSR14. The increased potential emissions associated with the Loup Creek Station are less than the significant amounts set forth in 45CSR14. The proposed changes result in an increase in Carbon Monoxide (0.82 TPY), Nitrogen Oxides (0.39 TPY), and Particulate Matter-10 (0.01 TPY), and a decrease in VOC emissions of 9.80 tpy. Therefore, a major modification has not occurred as a result of this permitting action.

45CSR19 The construction of the Loup Creek Station does not constitute a major modification and does not contribute to nonattainment. Therefore, 45CSR19 is not applicable to this facility.

40CFR63 Subpart HH (National Emission Standards for Hazardous Air Pollutants: Oil and Natural Gas Production and National Emission Standards for Hazardous Air Pollutants: Natural Gas Transmission and Storage)

With the inclusion of the control efficiency of the flare, facility potential emissions are below the major source applicability threshold of rule. The facility will then be a minor source of HAPs and not subject to the potentially applicable major source MACT standards listed in 40CFR 63 such as subpart HH, NESHAPs Natural Gas Production Facilities.

The source will be subject to the area portion of MACT Subpart HH, however will claim the less then 1tons/year benzene exemption under 40CFR63.764(e).

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: August 11, 2010 Ending Date: September 10, 2010

All written comments should be addressed to the following individual and office:

Beena Modi Title V Permit Writer West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Beena Modi West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.